

**FIG. 1**

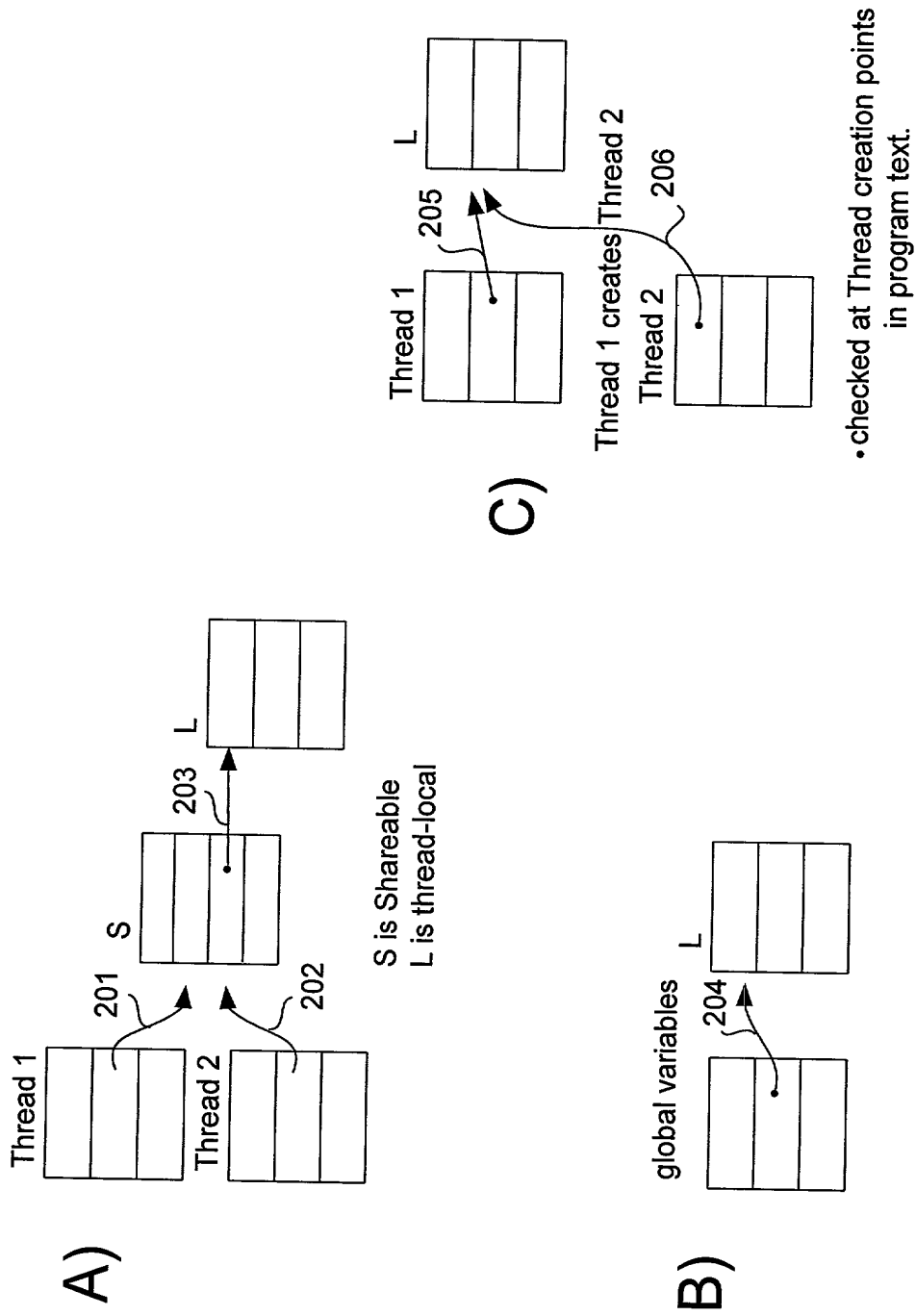


FIG. 2

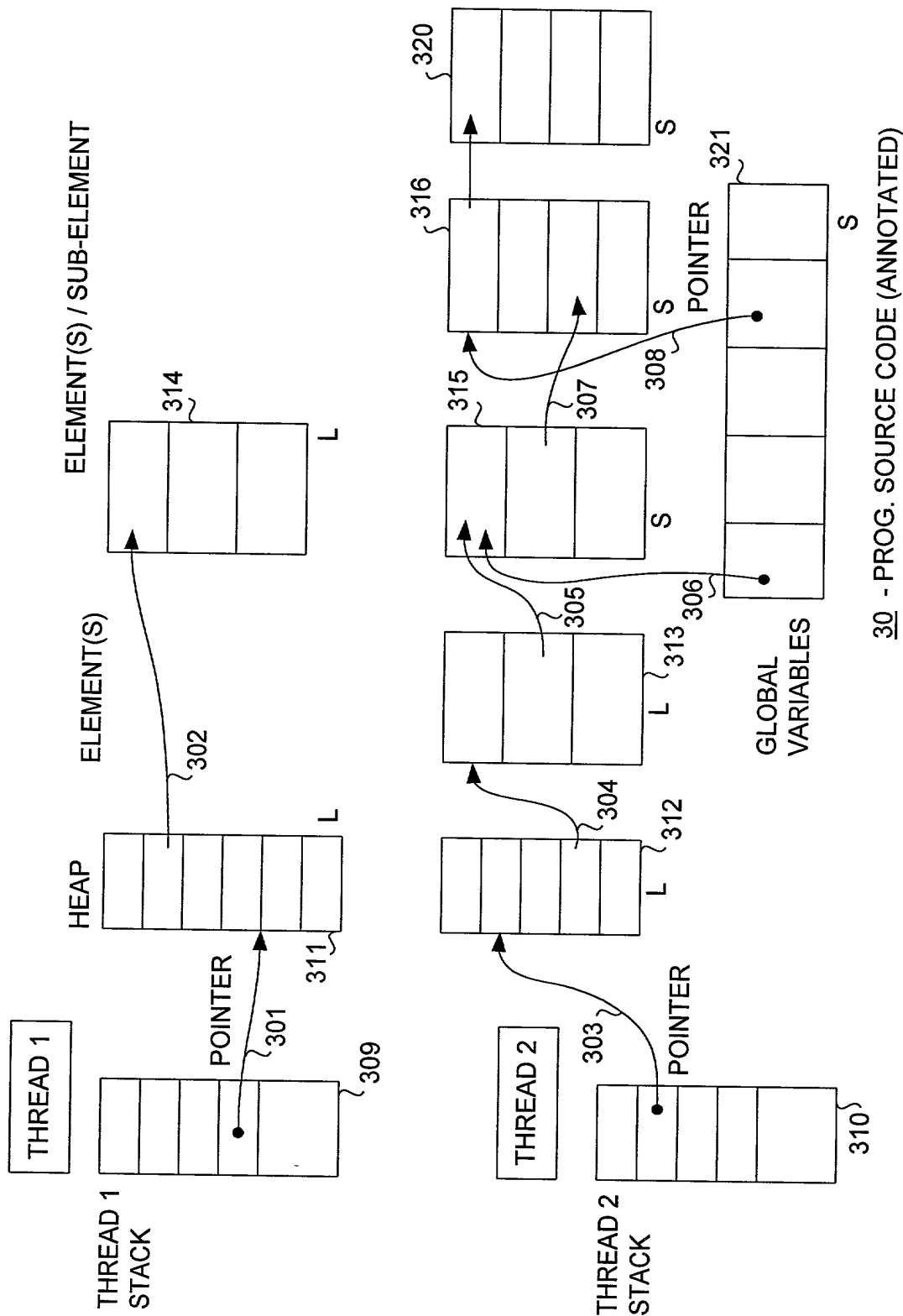
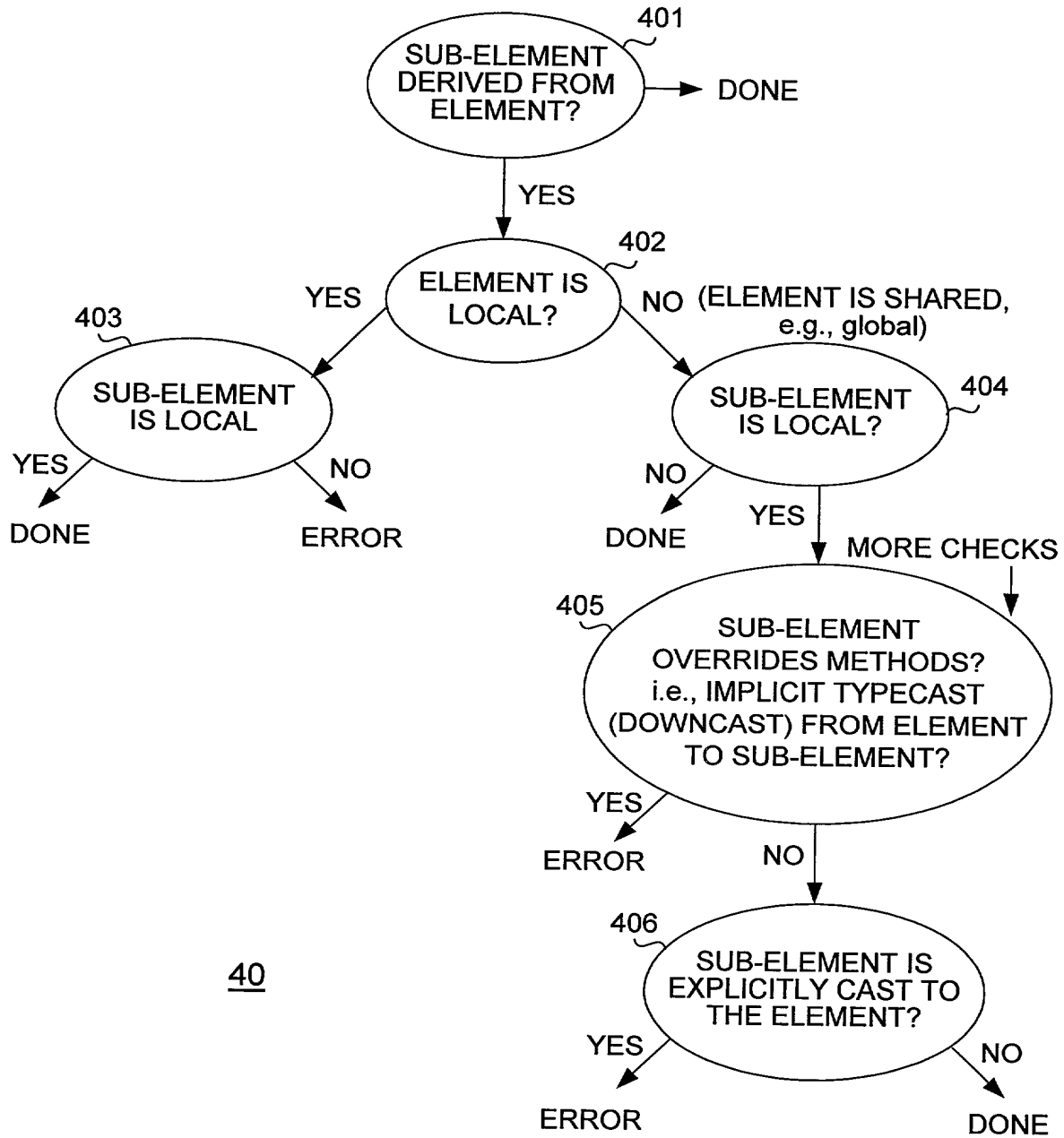


FIG. 3

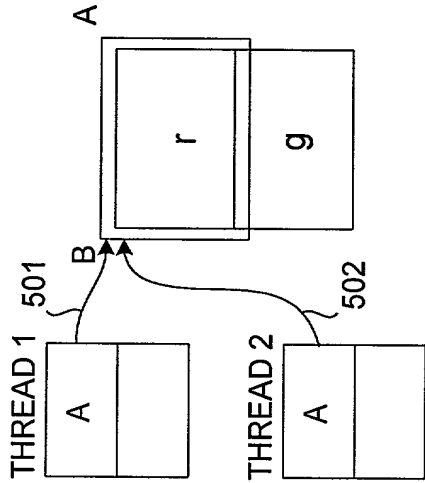
**FIG. 4**

MORE CHECKS:

```
thread shared class A {
    Object f;
    void foo() { ... }
}
```

```
thread local class B extends A {
    Object y;
    void foo() { ... this.g ... }
}
```

/ of type B



(typecasts)

OK if no downcasts from A to B

- explicit c is of type A  
 $d = (B)c$   
 $d.g$
- implicit  
 $c$  is of type A (but actually points to a B object)  
 $c.foo()$

Create a B object  
 cast it to type A  
 Pass it between threads  
Cast it back to type B  
 and access fields of B.

**FIG. 5**

```

error:
thread local  class A {
    Object f;
}
thread shared class B extends A {
    Object g;
}

```

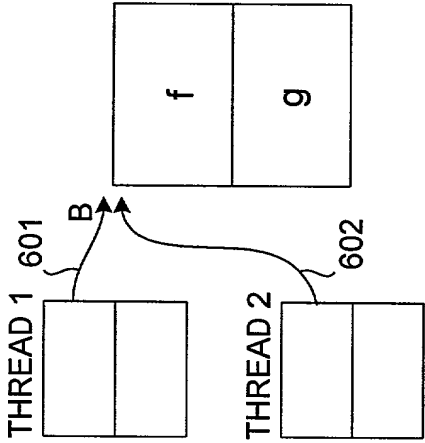


FIG. 6